

Percentages, Fractions and Decimals

1. Write each as a percentage. (a) $\frac{13}{100}$ (b) $\frac{21}{100}$ (c) $\frac{97}{100}$ (d) $\frac{3}{100}$ (e) $\frac{9}{100}$

2. For each percentage, write the equivalent fraction in simplest form.

- (a) 30% (b) 70% (c) 90%
- (d) 15% (e) 36% (f) 48%
- (g) 14% (h) 52% (i) 5%
- (j) 8%

3. Copy and complete this table.

Percentage	Fraction	Decimals
1%		
5%		
10%		
		0.20
25%		
	$\frac{1}{3}$	
	$\frac{1}{2}$	
		0.75
100%		

4. **Without a calculator**, calculate

- (a) 40% of £520 (b) 30% of 82 m (c) 70% of £36
- (d) 90% of 250 g (e) 20% of 450 mm (f) 60 % of 120 m

5. **Without a calculator**, calculate

- (a) 50% of £36 (b) 25% of £840
- (c) 20% of £12 (d) 10% of 55 g
- (e) 1% of 3 200 kg (f) $66\frac{2}{3}\%$ of £45
- (g) 75% of 32 cm (h) $33\frac{1}{3}\%$ of 285 g (i) 5% of 840 mm

6. **Without a calculator**, calculate

- (a) 3% of 400 g (b) 4% of 1 200 kg (c) 7% of £500
- (d) 8% of £360 (e) 6% of 220 g (f) 4% of 730 cm

7. **Without a calculator**, calculate the discount
- (a) 10% off, jacket priced at £85 (b) $33\frac{1}{3}$ % off, car priced at £4 500
 (c) 20% off, shirt priced at £55 (d) 25% off, book priced at £12
8. Without a calculator, calculate the new price
- (a) 25% increase, computer priced at £840 (b) 5% decrease, fridge priced at £360
 (c) $66\frac{2}{3}$ % increase, house priced at £27 000
9. **Using a calculator**, calculate
- (a) 63% off £124 (b) 19% of £5 200 (c) 32% of 180 m
 (g) 46% of £39 (h) 29% of 980 mm (i) 6% of £450
10. **Using a calculator**, find the new cost
- (a) Coat priced at £155, to be reduced by 45%
 (b) Weed-killer costing £24, discount of 8%
 (c) Bill of £86, to add a service charge of 12%
11. Change each fraction to a percentage
- (a) $\frac{9}{20}$ (b) $\frac{4}{25}$ (c) $\frac{8}{50}$ (d) $\frac{15}{60}$
12. A holiday representative has listed the activity choices for a group of tourists·
 Boat trip 32 Market 12 Beach party 16 Castle Visit 20
- (a) Calculate the total number of tourists
 (b) Calculate the percentage choosing each activity
13. 200 pupils have chosen social subjects as shown
 History - 96 pupils Geography – 60pupils Modern Studies – 84pupils
- Calculate the percentage choosing each subject.

